

TAKE A DEEP BREATH



Importance of Breathing

Did you know that you can have dysfunction breathing just like dysfunctional hips? The way your body inhales and exhales involve a lot of different muscles, including your diaphragm. The muscles surrounding your ribs, core, and thoracic spine all work together to make sure you can breathe properly. But due to stress, movement dysfunction, and muscle imbalances your breathing can become dysfunctional. This is often referred to as abnormal breathing or in chronic cases, breathing pattern disorders (BPD).

Some signs and symptoms of breathing pattern disorders are:

- Breathing is started in the upper chest instead of the belly.
- Mouth breathing.
- Forward head posture and rounded forward shoulders (a common posture in fire rescue personnel).
- Resting breathing rate is above 12-14 breaths per minute.
- Tight muscles in the front part of the neck and chest.
- Frequently sighing.

Outside of these signs and symptoms that can be obviously tied back to someone's breathing, **there are also common chronic pains and issues that could be a sign that your breathing is dysfunctional.** These issues can include:

- Tension headaches.
- Chronic neck and upper trap tightness.
- Pec and rib soreness.
- Hip flexor tightness.
- Conditions related to weak glute and hip muscles such as low back pain.

Assess Your Breathing

First, let's go over how you can assess yourself to determine if your breathing is considered normal or abnormal. Keep in mind that if you are experiencing any concerning symptoms such as difficulty breathing, chest pain, or numbness and tingling, please consult your primary care physician for evaluation.

Belly Breathing Assessment

- Start by placing one hand over top of your belly button and the other hand over your sternum or upper part of your chest (see photo below for hand placement).
- Take normal breaths and notice how your hand move as your breath.
- Does the hand on your chest moves first as your breath in? That could mean you are experiencing upper chest breathing, which is a sign of breathing dysfunctional that has an easy fix.
- If the hand on your belly moves first as you start your breath, then your breathing is most likely considered normal.

If you are having difficulty assessing your breathing yourself, Dr. Loftus is an expert in breathing and breathing pattern disorders after completing research on this topic during her doctoral studies. You are welcome to reach out to her directly with questions or to have yourself assessed and treated!



Dr. Kelsey Loftus

*Certified Athletic Trainer
MCFR Health & Injury
Prevention*

Did you know that you have someone working within MCFRS to provide you with quality injury care, injury prevention, and functional assessments to lengthen your time on the floor and keep you out of FROMS?

IMPORTANT ANNOUNCEMENT!

Starting this year, all station visit requests will be submitted through the link attached to the QR code below. Any station in any battalion can sign up for a station visit with the choice of activities, now including:

- [In-station injury clinic](#)
- Trigger point release work
- Group instruction on prevention of common injuries (low back pain, shoulder immobility, or any area of your choosing!)
- And more!

***ALL APPOINTMENTS ARE SAFE AND CONFIDENTIAL AND CANNOT EFFECT YOUR ABILITY TO STAY ON THE FLOOR WORKING!**



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Thankfully, fixing your breathing is easy and provides instant relief in most cases! Check out the attached lineup drill that covers how to fix your breathing and perform better as a result.

CLICK HERE TO MAKE AN INDIVIDUAL APPOINTMENT!

Breathing Lineup Drill

Breathing plays a crucial role in fire rescue performance. But did you know your breathing could be considered dysfunctional, just like your hips?

STEP 1: ASSESS

What are some ways to assess yourself to determine if you may be experiencing an abnormal breathing pattern?

BELLY BREATHING

1. Start by placing one hand over top of your belly button and the other hand over your sternum or upper part of your chest (see photo below for hand placement).

2. Take normal breaths and notice how your hand moves as your breath.

3. Does the hand on your chest move first as you breath in? That could mean you are experiencing upper chest breathing, which is a sign of dysfunctional breathing that has an easy fix.

4. If the hand on your belly moves first as you start your breath in, then your breathing is most likely considered normal.



****If you have questions on how to perform this self-assessment, please contact Dr. Kelsey Loftus for assessment and treatment!***

LOOK HOLISTICALLY

- Do I notice that my breathing is all coming from my upper chest?
- Do I have chronic neck tension?
- Are the muscles in the front of my neck more prominent?
- Am I experiencing upper back tightness?
- Do I feel like I'm sucking down air quickly from my SCBA in lower stress situations?
- Are my upper traps constantly tight?

If you're noticing one of more of these symptoms without a known illness or injury, your breathing function may be to blame.

How do I fix my breathing?



STEP 2: FIXING DYSFUNCTIONAL BREATHING

BOX BREATHING

1. Inhale through your nose for a count of 4. Make sure you are expanding your belly and rib cage.
2. Hold your breath for a count of 4.
3. Exhale through your mouth for a count of 4, making sure to empty your lungs. You can make a "sigh" sound.
4. Hold your breath with empty lungs for a count of 4.
5. Repeat until you feel your breathing naturally begins in your belly and you feel relaxed.

[CLICK HERE FOR A VIDEO: BOX BREATHING STEPS](#)

SQUEEZE & BREATHE

1. Can be done sitting in a chair or laying flat.
2. Take your thumbs and place them in the soft spot between your ribs and hip bones.
3. Wrap your 4 fingers around the front of your abdomen.
4. Squeeze your thumb and 4 fingers together, don't pinch.
5. Start by exhaling, then breathe in while counting to 4, focusing on forcing your squeezed 4 fingers and thumbs apart with the strength of your breathing.
6. Release your grip and very slowly exhale silently like you're blowing through a small straw for 8 counts.

[CLICK HERE FOR A VIDEO: SQUEEZE & BREATHE](#)